Amendments to the Specification

Please amend page 5, last paragraph, as follows:

An element of the present invention is that a device for minimally invasive, intravascular aortic valve extraction inside the aorta is designed in such a manner that a perfusion catheter is provided comprising at least one perfusion channel and at least two dilation units disposed at a distance from each other in the vicinity of the distal end of the catheter along the longitudinal extension of the catheter, both dilation units being penetrated by the perfusion channel and forming, in an inflated state, an at least almost fluid-tight occlusion with the vessel wall, preferably with the aortic wall. Of these two dilation units, at least the one disposed on the proximal side is provided with a passage through which at least one auxiliary catheter can be introduced in a fluid-tight manner for aortic valve ablation and/or the perfusion catheter is provided in the region between the two dilation units with at least one working channel with an outlet through which at least one auxiliary catheter can be introduced for aortic valve ablation.

Please amend page 13, second paragraph, as follows:

Preferably the perfusion catheter 1 is provided with a pump device 12 ~~(not depicted)~~ in the region between the inlet and outlet openings 6,7 in order to maintain a blood flow which corresponds approximately to the natural pumping performance of a human heart. Alternative suction devices, which reinforce the blood flow directed through the perfusion catheter, for example by means of a suction pump connected extracorporeally to the hollow catheter of the perfusion catheter, may also be provided.

Please amend page 14, first full paragraph, as follows:

Fig. 3 shows a view in the distal direction of the dilation unit 2 disposed on the proximal side. In this view, the dilation unit 2 is inside the aorta A in an inflated state. The shape and size of the dilation unit 2 are selected in such a manner that in an inflated state the dilation unit 2 forms a fluid-tight occlusion with the wall of aorta A. Down the center through dilation unit 2 (as well as through dilation unit 3) projects the perfusion catheter 1 whose hollow channel serves to maintain the blood flow. In addition, dilation unit 2 is provided with a multiplicity of passages which act as fluid-tight passage openings for auxiliary and working catheters. Thus, the circumferential edge of the dilation unit 2 surrounds in a fluid-tight manner two coronary perfusion catheters C introduced in the longitudinal direction of the aortic wall. The coronary perfusion catheters C ensure blood supply to the left and to the right coronary arteries during cardiac valve extraction. For this purpose, the coronary perfusion catheters C are provided at their distal end region with corresponding dilatable cuffs C' (Fig. 5) with which the coronary perfusion catheters can be placed and fixed inside the coronary arteries. The coronary arteries can be supplied, even during cardiac valve extraction, locally with blood from the abdominal region via abdominal catheters connected to the aforementioned coronary perfusion catheters C, if need be, using an interconnected external pump, in order to impede natural heart activity as little as possible.

Please amend page 16, second paragraph, as follows:

The individual passages projecting through the dilation unit 2 are each equipped with a fluid-tight sluice mechanism 15, which in a simplest case is based on the elasticity of the balloon material of which the dilation unit is made. Either the elastic, inflatable material snuggles, practically following the contours, to an outer circumferential edge of the inflated dilation unit 2 and of the aortic wall, such as is the case for example in [[fig.]] Fig. 3 with reference to the passages for the coronary catheter C, or the passages are located in the middle of the dilation unit and form tube-like passages in which the channel walls snuggle to each other in a fluid-tight manner in an inflated state and are pressed apart in a fluid-tight manner when a catheter is introduced.